

**In the Claims:**

Please amend Claims 1, 3 and 4 as follows:

1. (Currently Amended) A dissipative layer for use in paper-containing products, comprising:
  - (a) at least one paper-forming substance; and
  - (b) an effective amount of at least one static dissipative substance to provide a desired static dissipative property, wherein the static dissipative substance is homogenously admixed with the paper-forming substance and further wherein the dissipative layer is at least substantially free of carbon particles.
2. (Original) The dissipative layer according to claim 1 wherein the dissipative substance is a conductive polymer present in an amount effective to provide an electrical resistance between  $10^4$  and  $10^{11}$  ohms at a relative humidity of less than or equal to 12 percent.
3. (Currently Amended) The dissipative layer according to Claim 1, wherein the static dissipative substance comprises ~~ECC1-7091RV~~ at least one of diacetone acrylamide-diallydimethylammonium chloride copolymer, polyethylene glycol, and diethanol amide.
4. (Currently Amended) The dissipative layer according to claim 3 comprising ~~ECC1-7091RV~~ diacetone acrylamide-diallydimethylammonium chloride copolymer in an amount between about 0.5 and 7.5 percent by weight.
5. (Original) The dissipative layer according to claim 3 comprising diethanol amide in an amount no less than about 1.5% by weight.

6. (Original) The dissipative layer according to claim 3 comprising polyethylene glycol in an amount not less than about 1.5% by weight.
7. (Original) The dissipative layer according to claim 1 further comprising an effective color producing amount of a dissipative pigment or dye.
8. (Original) The dissipative layer according to claim 1 wherein the paper forming substance comprises pulp, rice paper, hemp rags, cotton, and textiles.
9. (Original) The dissipative layer according to claim 8 wherein the paper forming substance comprises virgin or recycled materials.
10. (Previously Withdrawn)
11. (Previously Withdrawn)
12. (Previously Withdrawn)
13. (Previously Withdrawn)
14. (Previously Withdrawn)
15. (Previously Withdrawn)
16. (Previously Withdrawn)
17. (Previously Withdrawn)
18. (Previously Withdrawn)

19. (Previously Withdrawn)

20. (Previously Withdrawn)

21. (Previously Withdrawn)

22. (Previously Withdrawn)

23. (Previously Withdrawn)

24. (Previously Withdrawn)

25. (Previously Withdrawn)

26. (Previously Withdrawn)

27. (Previously Withdrawn)

28. (Previously Withdrawn)

29. (Previously Withdrawn)

30. (Previously Withdrawn)

**REMARKS**

Claims 1-9 remain pending in the application.

Claim 1 has been amended herein in order to more particularly define the claimed invention.

Claims 3 and 4, and the paragraph beginning on page 12, line 3 of the specification have been amended herein to incorporate the correct chemical name for ECCI 7091RV in a bonafide attempt to place the application in condition for allowance. Support for these amendments is implicit within the disclosure of the specification, as evidenced by the STN International printout indicating the chemical nomenclature for Calgon CP 7091RV, attached hereto as Appendix "A." No new matter has been added by these amendments.

**Objections Under 37 C.F.R. § 1.84(p)(4)**

In an objection pursuant to 37 C.F.R. § 1.84(p)(4), the drawings were objected to for allegedly using reference character "35" to represent both surfaces of the dissipative layer and also the internal layer of the dissipative layer. For the reasons set forth below, Applicants respectfully traverse the Examiner's objection.

37 C.F.R. § 1.84(p)(4) states that the same part of an invention appearing in more than one view of the drawing must always be designated by the same reference character, and the same reference character must never be used to designate different parts. Contrary to the Examiner's objection, reference character "35" does not represent different parts of the present invention but rather designates different aspects of the same part, namely the homogenous dissipative layer. To that end, as recited in Claim of the instant application, the dissipative layer is comprised of a homogenous mixture of a paper forming substance and a static dissipative substance. Therefore, the reference character "35" can adequately represent the entirety of the dissipative layer, including both surfaces as well as the internal section of

the dissipative layer. Therefore, Applicants believe that the present objections to the drawings pursuant to 37 C.F.R. § 1.84(p)(4) are in error and respectfully request that these objections be withdrawn.

**Rejections Under 35 U.S.C. § 112**

The Office Action has rejected original claims 3 and 4 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. While Applicants do not concede the Examiner's position, it is respectfully submitted that the amendments to Claims 3 and 4 as submitted herewith obviate any outstanding rejections pursuant to 35 U.S.C. § 112, second paragraph, and therefore said rejections should be withdrawn.

**Rejections under 35 U.S.C. § 102(b)**

The office action has rejected Claim 1, and certain claims depending therefrom under 35 U.S.C. § 102(b) as allegedly being anticipated by each of U.S. Patent Nos. 3,682,696 (hereinafter the '696 patent); 3,830,655 (hereinafter the '655 patent); 3,902,959 (hereinafter the '959 patent); 4,806,410 (hereinafter the '410 patent); and 5,089,327 (hereinafter the '327 patent).

It is well established that in order for a prior art reference to be anticipatory pursuant to 35 U.S.C. § 102(b) it must teach each and every feature of the claimed invention. As set forth below, each of the above-mentioned references relied upon by the Examiner fails to teach each and every feature of the invention recited in Claim 1 of the instant application. Therefore, any rejections pursuant to 35 U.S.C. § 102(b) in view of these references should be withdrawn.

As amended herein, Claim 1 of the instant application recites a dissipative layer for use in paper-containing products, comprising, in part, at least one paper-forming substance and an effective amount of at least one static dissipative substance wherein the static dissipative substance is **homogenously admixed** with the paper-forming substance.

Moreover, as discussed on page 12, lines 22-25 of the specification, the use of a homogenous mixture allows one to achieve certain desired properties, e.g., a volume resistivity quality in environments having a low relative humidity. In contrast to Claim 1, as set forth above, each of the '696, '655, '959, '410 and '327 patents fails to teach a dissipative layer comprised of a homogenous mixture of a paper-forming substance and a static dissipative substance. Moreover, there certainly is no teaching in these references that a homogenous mixture can be used to achieve desired properties.

First, the '697 patent teaches a method for producing antistatic paper which comprises either adding a static electricity preventive agent to the pulp in the paper manufacturing process or admixing the static electricity preventive agent with a paper coating material during a paper coating process. Further, the '696 patent also teaches that the method is performed so that the static electricity preventive agent adheres to the inside or surface of the paper uniformly. In contrast to the instant claims, the '696 patent makes no mention of a dissipative layer comprised of a **homogenous mixture** of a paper forming substance and a static dissipative substance. Therefore, the '696 patent fails to teach each and every feature recited in Claim 1 and those claims depending therefrom and, as such, any rejection pursuant to 35 U.S.C. § 102(b) based thereon should be withdrawn.

The '655 patent teaches an electrically conductive paper that is made by **coating or impregnating** paper with a polymer containing at least 70 percent quaternised dialkylamino methylene acrylamide or methacrylamide groups, and then curing the polymer. In contrast to Claim 1 of the instant application, the '655 patent only teaches an electrically conductive paper that is formed by coating or impregnating paper and then curing the paper, whereas Claim 1 recites a dissipative layer comprised of a homogenous admixture of a paper forming substance and a static dissipative substance. The '655 patent fails to teach a homogenous mixture of a paper forming substance and a static dissipative substance and therefore fails to teach each and every feature of the instant claims. As such, any rejections pursuant to 35 U.S.C. § 102(b) based thereon should be withdrawn.

The '959 patent teaches code paper, suitable for use for punch-coding purposes, that is produced by a process that includes sizing premanufactured paper with a **surface applied** size treatment. Once again, in contrast to Claim 1 of the instant invention, the '959 patent fails to teach a dissipative layer comprised of a **homogenous mixture** of a paper forming substance and a static dissipative substance. Therefore, the '959 patent fails to teach each and every feature recited in Claim 1 and those claims depending therefrom and, as such, any rejection pursuant to 35 U.S.C. § 102(b) based thereon should be withdrawn.

The '410 patent teaches a process for the production of antistatic dissipative papers wherein the papers are produced either by the application of a liquid antistatic material to a still wet porous web prior to completion of the drying of the paper or, alternatively, by the impregnating a web of dry paper with a liquid antistatic material and then drying the treated web. In both instances, the '410 patent only teaches an antistatic dissipative paper that comprises a coating or otherwise treating a preformed web. Moreover, in contrast to Claim 1 of the instant invention, the '410 patent makes no mention of a dissipative layer comprised of a **homogenous mixture** of a paper forming substance and a static dissipative substance. Therefore, the '410 patent fails to teach each and every feature recited in Claim 1 and those claims depending therefrom and, as such, any rejection pursuant to 35 U.S.C. § 102(b) based thereon should be withdrawn.

Lastly, the '327 patent teaches an anti-static paper sheet for use in high pressure laminates, the sheet being treated with a wet strength resin and saturated with a water soluble polycationic quaternary ammonium polymer. Similar to the previously described references, the '327 Patent only describes treating a previously manufactured sheet material. To that end, in contrast to the invention recited in Claim 1 of the instant application, the '327 patent makes no mention of a dissipative layer comprised of a **homogenous mixture** of a paper forming substance and a static dissipative substance. Therefore, the '327 patent fails to teach each and every feature recited in Claim 1, and those claims depending therefrom, and, as such, any rejection pursuant to 35 U.S.C. § 102(b) based thereon should be withdrawn.

**Rejections Under 35 U.S.C. § 103(a)**

The Office Action has further rejected Claim 1 of the instant application and certain claims depending therefrom under 35 U.S.C. § 103(a) as allegedly being obvious in view of the '410 patent and/or the '696 patent.

It is equally well established that in order to establish a *prima facie* case of obviousness pursuant to 35 U.S.C. § 103(a), the prior art must teach, or at least suggest, the claimed invention as a whole. Moreover, there must be adequate motivation and a reasonable expectation of success to undertake the modifications proposed in the rejection. As set forth below, it is respectfully submitted that none of the references relied upon by the Examiner in the instant office action, alone or in combination, teach or at least suggest, the claimed invention as a whole. Moreover, none of these references provide the adequate motivation and a reasonable expectation of success to undertake the modifications proposed in the rejection.

As described in detail above, none of the '696, '655, '959, '410 and '327 patents teaches or even suggests a dissipative layer comprised of a homogenous mixture of a paper forming substance and a static dissipative substance. Moreover, none of these references teaches or suggests that a homogenous mixture can be used to achieve certain desired properties. In addition, the combination of any two or more of these references similarly fails to provide that adequate motivation to arrive at the dissipative layer comprising a homogenous mixture of a paper forming substance and a static dissipative substance as recited in Claim 1 of the instant invention. Therefore, it is respectfully submitted that the Office Action has failed to establish a *prima facie* case of obviousness pursuant to 35 U.S.C. § 103(a) and, as such, the outstanding obviousness rejections in view of these references should be withdrawn.

## CONCLUSION

In view of the Amendments and Remarks set out above, it is respectfully asserted that the rejections set forth in the Office Action of November 29, 2002 have been overcome and that the application is in condition for allowance. Therefore, Applicants respectfully seek notification of same.

No additional fee is believed due; however, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

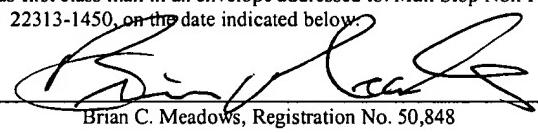


Brian C. Meadows  
Registration No. 50,848

NEEDLE & ROSENBERG, P.C.  
Customer Number 23859  
(678) 420-9300  
(678) 420-9301 (fax)

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence, including any items indicated as attached or included, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date indicated below.



Brian C. Meadows, Registration No. 50,848

7.18.03  
Date

177798